National Voluntary

Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Florida Department of Agriculture Metrology Laboratory 3125 Conner Blvd. Lab #2 Tallahassee, FL 32399-1650 Ms. Amy Smith Phone: 850-921-1570 Fax: 850-921-1593 E-mail: amy.smith@freshfromflorida.com URL: http://www.freshfromflorida.com	**Fields of Calibration** Mechanical This laboratory is compliant to ANSI/NCSL Z540-1-1994; Part 1. (NVLAP Code: 20/A01)

CALIBRATION AND MEASUREMENT CAPABILITIES (CMC) Notes 1,2

Measured Parameter or Device Calibrated	Range	Expanded Uncertainty Note 3	Remarks
MECHANICAL			
MASS DETERMINATION (20/M08)			
Metric	30 kg 25 kg 20 kg 10 kg 5 kg 3 kg 2 kg 1 kg 500 g 300 g 200 g 100 g 50 g 30 g 20 g 10 g 5 g 3 g 2 g 1 g	20 mg 20 mg 12 mg 2.7 mg 1.5 mg 1.4 mg 0.12 mg 0.18 mg 82 µg 0.1 mg 47 µg 39 µg 14 µg 8.0 µg 13 µg 13 µg 6.3 µg 2.5 µg 2.4 µg 2.2 µg	Echelon II

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

CALIBRATION AND MEASUREMENT CAPABILITIES (CMC) [Notes 1,2]

Measured Parameter or Device Calibrated	Range	Expanded Uncertainty [Note 3]	Remarks
	500 mg	2.5 µg	
	300 mg	2.6 µg	
	200 mg	2.2 µg	
	100 mg	2.1 µg	
	50 mg	1.7 µg	
	30 mg	2.1 µg	
	20 mg	2.9 µg	
	10 mg	1.6 µg	
	5 mg	2.1 µg	
	3 mg	1.9 µg	
	2 mg	1.9 µg	
	1 mg	1.6 µg	
Avoirdupois	1000 lb	4.7 g	Echelon II
	500 lb	1.9 g	
	50 lb	19 mg	
	30 lb	8.0 mg	
	25 lb	11 mg	
	20 lb	2.8 mg	
	10 lb	1.5 mg	
	5 lb	1.3 mg	
	3 lb	1.2 mg	
	2 lb	0.18 mg	
	1 lb	84 µg	
	0.5 lb	51 µg	
	0.3 lb	47 µg	
	0.2 lb	40 µg	
	0.1 lb	15 µg	
	0.05 lb	13 µg	
	0.03 lb	6.3 µg	
	0.02 lb	5.3 µg	
	0.01 lb	3.1 µg	
	0.005 lb	2.5 µg	
	0.002 lb	2.4 µg	

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

CALIBRATION AND MEASUREMENT CAPABILITIES (CMC) [Notes 1,2]

Measured Parameter or Device Calibrated	Range	Expanded Uncertainty [Note 3]	Remarks
	0.001 lb	2.6 µg	
	10 oz	0.1 mg	
	8 oz	51 µg	
	5 oz	47 µg	
	4 oz	44 µg	
	3 oz	38 µg	
	2 oz	16 µg	
	1 oz	8.2 µg	
	1/2 oz	5.9 µg	
	1/4 oz	4.6 µg	
	1/8 oz	2.9 µg	
	1/16 oz	2.5 µg	
	1/32 oz	2.3 µg	
Metric	500 kg	8.0 g	Echelon III
	250 kg	4.0 g	
	30 kg	0.35 g	
	25 kg	0.30 g	
	20 kg	0.24 g	
	10 kg	0.12 g	
	5 kg	59 mg	
	3 kg	35 mg	
	2 kg	24 mg	
	1 kg	12 mg	
	500 g	8.2 mg	
	300 g	7.1 mg	
	200 g	4.7 mg	
	100 g	2.4 mg	
	50 g	1.2 mg	
	30 g	0.71 mg	
	20 g	0.47 mg	
	10 g	0.24 mg	
	5 g	0.18 mg	

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

CALIBRATION AND MEASUREMENT CAPABILITIES (CMC) [Notes 1,2]

Measured Parameter or Device Calibrated	Range	Expanded Uncertainty [Note 3]	Remarks
	3 g	0.16 mg	
	2 g	0.13 mg	
	1 g	0.11 mg	
	500 mg	85 µg	
	300 mg	72 µg	
	200 mg	64 µg	
	100 mg	51 µg	
	50 mg	41 µg	
	30 mg	35 µg	
	20 mg	31 µg	
	10 mg	25 µg	
	5 mg	20 µg	
	3 mg	17 µg	
	2 mg	14 µg	
	1 mg	12 µg	
Avoirdupois	1000 lb	7.6 g	Echelon III
	500 lb	3.8 g	
	50 lb	0.27 g	
	30 lb	0.17 g	
	25 lb	0.13 g	
	20 lb	0.11 g	
	10 lb	53 mg	
	5 lb	27 mg	
	3 lb	17 mg	
	2 lb	11 mg	
	1 lb	8.3 mg	
	0.5 lb	5.3 mg	
	0.3 lb	3.2 mg	
	0.2 lb	2.1 mg	
	0.1 lb	1.1 mg	
	0.05 lb	0.53 mg	
	0.03 lb	0.32 mg	
	0.02 lb	0.21 mg	

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

CALIBRATION AND MEASUREMENT CAPABILITIES (CMC) [Notes 1,2]

Measured Parameter or Device Calibrated	Range	Expanded Uncertainty [Note 3]	Remarks
	0.01 lb	0.18 mg	
	0.005 lb	0.14 mg	
	0.003 lb	0.12 mg	
	0.002 lb	0.10 mg	
	0.001 lb	85 µg	
	10 oz	6.7 mg	
	8 oz	5.3 mg	
	4 oz	2.7 mg	
	3 oz	2.0 mg	
	2 oz	1.3 mg	
	1 oz	0.64 mg	
	1/2 oz	0.33 mg	
	1/4 oz	0.20 mg	
	1/8 oz	0.15 mg	
	1/16 oz	0.13 mg	
	1/32 oz	0.10 mg	
Weight Carts	5000 lb	99 g	NIST HB 105-8
	4000 lb	80 g	
	3000 lb	62 g	
VOLUME AND DENSITY (20/M12)			
Volume	1500 gal	27 in^3	Volume Transfer Method
	1000 gal	21 in^3	
	750 gal	15 in^3	
	525 gal	11 in^3	
	500 gal	13 in^3	
	200 gal	4.2 in^3	
	100 gal	2.4 in^3	
	60 gal	2.0 in^3	
	50 gal	1.9 in^3	
	10 gal	0.52 in^3	
	5 gal	0.42 in^3	4 in neck

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

CALIBRATION AND MEASUREMENT CAPABILITIES (CMC) [Notes 1,2]

Measured Parameter or Device Calibrated	Range	Expanded Uncertainty [Note 3]	Remarks
Liquefied Petroleum Gas Prover (LPG)	5 gal	0.28 in^3	3 in neck
	5 gal	0.21 in^3	"J"
	100 gal	3.4 in^3	Volume Transfer Method
	25 gal	1.2 in^3	
END			

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program

CALIBRATION LABORATORIES **NVLAP LAB CODE 200560-0**

Notes

Note 1: A Calibration and Measurement Capability (CMC) is a description of the best result of a calibration or measurement (result with the smallest uncertainty of measurement) that is available to the laboratory's customers under normal conditions, when performing more or less routine calibrations of nearly ideal measurement standards or instruments. The CMC is described in the laboratory's scope of accreditation by: the measurement parameter/device being calibrated, the measurement range, the uncertainty associated with that range (see note 3), and remarks on additional parameters, if applicable.

Note 2: Calibration and Measurement Capabilities are traceable to the national measurement standards of the U.S. or to the national measurement standards of other countries and are thus traceable to the internationally accepted representation of the appropriate SI (Système International) unit.

Note 3: The uncertainty associated with a measurement in a CMC is an expanded uncertainty with a level of confidence of approximately 95 %, typically using a coverage factor of $k = 2$. However, laboratories may report a coverage factor different than $k = 2$ to achieve the 95 % level of confidence. Units for the measurand and its uncertainty are to match. Exceptions to this occur when marketplace practice employs mixed units, such as when the artifact to be measured is labeled in non-SI units and the uncertainty is given in SI units (Example: 5 lb weight with uncertainty given in mg).

> **Note 3a:** The uncertainty of a specific calibration by the laboratory may be greater than the uncertainty in the CMC due to the condition and behavior of the customer's device and specific circumstances of the calibration. The uncertainties quoted do not include possible effects on the calibrated device of transportation, long term stability, or intended use.
> **Note 3b:** As the CMC represents the best measurement results achievable under normal conditions, the accredited calibration laboratory shall not report smaller uncertainty of measurement than that given in a CMC for calibrations or measurements covered by that CMC.
> **Note 3c:** As described in Note 1, CMCs cover calibrations and measurements that are available to the laboratory's customers under *normal conditions.* However, the laboratory may have the capability to offer special tests, employing special conditions, which yield calibration or measurement results with lower uncertainties. Such special tests are not covered by the CMCs and are outside the laboratory's scope of accreditation. In this case, NVLAP requirements for the labeling, on calibration reports, of results outside the laboratory's scope of accreditation apply. These requirements are set out in Annex A.1.h. of NIST Handbook 150, Procedures and General Requirements.

Note 4: Uncertainties associated with field service calibration may be greater as they incorporate on-site environmental contributions, transportation effects, or other factors that affect the measurements. (This note applies only if marked in the body of the scope.)

Note 5: Values listed with percent (%) are percent of reading or generated value unless otherwise noted.

Note 6: NVLAP accreditation is the formal recognition of specific calibration capabilities. Neither NVLAP nor NIST guarantee the accuracy of individual calibrations made by accredited laboratories.

2020-06-11 through 2021-06-30
Effective dates

For the National Voluntary Laboratory Accreditation Program